

**Executive Order 13149: Greening the Government
through Federal Fleet and Transportation Efficiency**

Guidance Document for Federal Agencies

July 2000

**Prepared by
Office of Technology Utilization
Office of Energy Efficiency and Renewable Energy
U.S. Department of Energy**

Contents

List of Tables	ii
Introduction	1
1-0 Goals and Objectives of Executive Order 13149	2
2-0 Implementation of Executive Order 13149	3
2-1 Designation of a Senior-Level Agency Official	3
2-2 Developing an Agency's Compliance Strategy	4
2-2-1 Petroleum Consumption Baseline Calculation	4
2-2-2 Required Approaches to Petroleum Reduction.....	5
2-2-2-1 Use of Alternative Fuels in Alternative Fuel Vehicles.....	6
2-2-2-2 Acquisition of Higher Fuel Economy Vehicles.....	7
2-2-3 Optional Approaches to Petroleum Reduction	10
2-2-4 Management Approaches to Achieving the Goal of E.O. 13149	11
2-2-5 Guidelines for Strategy Development.....	11
2-3 Annual Reporting Requirements and the FAST Tracking System	12
2-3-1 Obtaining Access to FAST	13
2-3-2 Components of a FAST Report	13
2-3-3 Submission of Annual Report.....	14
2-3-4 Accountability.....	14
3-0 Applicability of the Executive Order.....	14
3-1 Exemptions and Classes of Exempt Vehicles	15
3-2 Vehicle Credits for EPA Act Compliance	15
3-3 Compliance.....	16
4-0 General Provisions	17
5-0 Specific Agency Responsibilities	17
5-1 Duties of Office of Management and Budget	17
5-2 Duties of Department of Energy	17
5-3 Duties of General Services Administration	18
5-4 Duties of Environmental Protection Agency	18
6-0 Environmental Considerations	18
6-1 Green Products	19
6-2 Tier II Vehicles.....	19
Appendices	20
1: Additional Resources	21
2: Definitions.....	22
3: Timetable for Implementation of Executive Order 13149	26
4: Executive Order 13149.....	27

List of Tables

1. Performance Requirements of E.O. 13149 Directed to Federal Fleets	2
2. Required Procedures for Implementing the Order	3
3. Duties of the Senior-Level Official in Each Agency.....	4
4. Two Primary Approaches for Achieving a 20% Petroleum Reduction.....	5
5. An Example of Petroleum Displacement Achieved Using the Two Strategies	6
6. Calculation of a Fleet's Average Fuel Economy.....	9
7. Optional Approaches Available to Agencies for Achieving a 20% Reduction in Petroleum Use	10
8. Data Required in Draft and Final Strategic Plans	12
9. Credits Earned Toward EPCa Compliance.....	16

Introduction

When President Clinton signed Executive Order (E.O.) 13149, *Greening the Government through Federal Fleet and Transportation Efficiency*, on April 21, 2000, he directed Federal agencies to take a leadership role in the reduction of vehicular petroleum consumption. In particular, *each agency operating 20 or more motor vehicles within the United States, must develop and implement a strategy for reducing its entire vehicle fleet's annual petroleum consumption by at least 20 percent by the end of FY 2005, compared with FY 1999 petroleum consumption levels, through increases in fleet efficiencies and the use of alternative fuels.*

This *Guidance Document* has been prepared to help agencies understand the specific requirements of the new Executive Order, and to develop a strategy for meeting them. It discusses various methods an agency can use to meet the new requirements and demonstrates simple calculations for determining the agency's fleet fuel economy and petroleum consumption. It also thoroughly explains reporting requirements and the Federal Automotive Statistical Tool (FAST), which will be used for reporting. Appendix 1 points the reader to resources for additional information and assistance, Appendix 2 provides definitions of terms, and Appendix 3 sets forth a timeline for reports and other necessary agency submissions. A copy of Executive Order 13149 appears as Appendix 4.

The document has been prepared with the needs of the agencies in mind and to make it easier to achieve the goal of Executive Order 13149, *a 20 percent reduction in annual petroleum consumption by FY 2005*, within the constraints of each agency's unique fleet requirements. Independent agencies are not required but are urged to comply with the new Order.

The new Order does not replace the Energy Policy Act of 1992 (EPAct), whose alternative fuel vehicle (AFV) acquisition requirements must continue to be met. Under this Authority, 75 percent of vehicle acquisitions in the agency's covered fleet are required to be AFVs. E.O. 13149 requires agencies to develop and implement a plan for achieving a 20 percent reduction in its motor vehicle fleets' petroleum consumption by FY 2005 compared to a FY 1999 baseline, in addition to the EPAct AFV acquisition requirements. Key provisions of the Order highlighted and explained in this guidance document to help agencies achieve this goal include:

- The designation of a senior-level official, by the head of each agency, to assume the responsibilities associated with this Order and the agency's AFV and fleet fuel efficiency programs
- The development of an agency compliance strategy for meeting the requirements of this Order
- The requirement that agencies must use a combination of energy efficiency and alternative fuel use activities to successfully achieve the goal of this Order
 - An agency will need to ensure the use of alternative fuels in AFVs a majority of the time that the vehicles are in operation
 - An agency is required to increase fuel efficiency of new light-duty vehicle acquisitions by 1 mpg by FY 2002 and 3 mpg by FY 2005

While reviewing this guidance, readers should keep the following general guidelines in mind.

- Any agency that uses [General Services Administration (GSA) or agency owned or leased] Federal vehicles must comply with the Order.
- The 20 percent reduction in petroleum consumption by FY 2005 takes into consideration an agency's entire fleet of vehicles (except fuel consumption in exempt vehicles), including light-, medium-, and heavy-duty vehicles.
- The increase in the combined fuel economy rating of new vehicle acquisitions of 1 mpg in FY 2002 and 3 mpg in FY 2005 pertains to covered light-duty vehicles only.
- Under EPAct, exempt vehicles include military tactical vehicles, law enforcement and emergency vehicles, medium- and heavy-duty vehicles, and vehicles that are geographically located outside a covered metropolitan statistical area (MSA). However, under E.O. 13149 only military vehicles, law enforcement and emergency vehicles are considered exempt. (A discussion of exemptions can be found in Section 3-1.)
- The reporting requirements of this Order are being combined with the requirements of the GSA Form SF-82 into the FAST reporting database system.
- The reporting requirements of the Executive Order are not the same as the *EIA-886 "Alternative Transportation Fuels and Alternative Fueled Vehicles" Annual Survey*, which must be submitted to the Energy Information Administration (EIA) separately.
- Agencies may prepare for carrying out the requirements of this Order by visiting the Web site, www.ott.doe.gov/epact/federal_fleets, to familiarize themselves with the tools available.

1-0 Goals and Objectives of Executive Order 13149

The overall intention of Executive Order 13149 is for Federal agencies to take a leadership role in the reduction of petroleum consumption by motor vehicles, as stated below:

Each agency operating 20 or more motor vehicles within the United States shall reduce its entire vehicle fleet's annual petroleum consumption by at least 20 percent by the end of FY 2005, compared with FY 1999 petroleum consumption levels.

Table 1 lists the required objectives (performance requirements) established for Federal fleets by E.O. 13149 for meeting this goal.

Table 1. Performance Requirements of E.O. 13149 Directed to Federal Fleets

• By FY 2005, use alternative fuels in alternative fuel vehicles measured on an agency-wide basis the majority of the time these vehicles are in operation.
• Increase the average DOE/EPA combined fuel economy rating of annual light-duty vehicle acquisitions by at least 1 mpg by FY 2002 and 3 mpg by FY 2005.

2-0 Implementation of Executive Order 13149

E.O. 13149 sets forth three primary procedures that Federal agencies must carry out in order to implement the Order. They are summarized in Table 2, below, in the order they are required to occur:

Table 2. Required Procedures for Implementing the Order

<ul style="list-style-type: none">• By July 20, 2000, the head of each agency must designate a senior-level official who will be responsible for the agency's compliance with all requirements of this Order and of EPAct.	Due Date: July 20, 2000
<ul style="list-style-type: none">• Each agency must submit a compliance strategy to DOE for evaluation no later than October 18, 2000, which DOE will review and forward to the Office of Management and Budget (OMB).	Due Date: October 18, 2000
<ul style="list-style-type: none">• Agencies must use the DOE developed on-line tracking system to collect compliance data and submit an annual report of compliance with this Order due November 1st each year.	Due Date: November 1st Each year

Each of these required procedures are discussed in turn in the following sub-sections of Section 2.

2-1 Designation of a Senior-Level Agency Official

E.O. 13149 directs the head of each agency to designate a senior-level agency official responsible for ensuring the agency meets the requirements of alternative fuel vehicle and fleet fuel efficiency programs, including the requirements of this Order. The agency must notify the U.S. Department of Energy (DOE) and the Office of Management & Budget (OMB) of the individual selected by July 20, 2000. Agencies may wish to designate an Assistant Secretary (or equivalent-level official) to carry out the responsibilities associated with compliance with this Order. Executive Orders 13101 and 13123 also require such an appointment. If appropriate, agencies may want to examine whether the same person can do all three assignments.

This senior official shall be accountable for all of the activities shown in Table 3.

Table 3. Duties of the Senior-Level Official in Each Agency

<ul style="list-style-type: none">• Assembling an appropriate team with the necessary resources to ensure the attainment of the 20 percent reduction in annual petroleum consumption, majority alternative fuel use in AFVs, and a 1-mpg increase by FY 2002 and a 3-mpg increase in light-duty fuel economy by FY 2005
<ul style="list-style-type: none">• Developing an integrated strategy to meet the agency's petroleum consumption reduction goal outlined in the Order
<ul style="list-style-type: none">• Submitting the agency's strategy to DOE, with supporting data, for evaluation, by October 18, 2000 (if satisfactory, DOE to forward it to OMB for final approval)
<ul style="list-style-type: none">• Ensuring the agency's performance in meeting the goals of the Order are reported annually by November 1, utilizing the on-line Federal Automotive Statistical Tool (FAST) devised by DOE to track an agency's progress in meeting the goals of the Order
<ul style="list-style-type: none">• Incorporating the agency's strategy for meeting the goals of this Order into the annual budget submission to OMB
<ul style="list-style-type: none">• Ensuring that compliance with the E.O. is in accordance with EPAct requirements
<ul style="list-style-type: none">• Encouraging the purchase of EPA-rated Tier II vehicles and environmentally preferable motor vehicle products

In addition to the responsibilities of the Senior-Level Official at each agency, certain responsibilities for implementing programs related to this Order are assigned to the leadership at other Federal agencies. These assignments are discussed in Section 5-0 of this document.

2-2 Developing an Agency's Compliance Strategy

Executive Order 13149 requires each agency to develop a compliance strategy for meeting the Order's requirements. Each agency has the flexibility to evaluate a variety of options to ensure its strategy best fits the mission and make-up of its fleets. As already stated, however, Executive Order 13149 requires each Federal agency that operates at least 20 motor vehicles within the 50 states and the District of Columbia to meet the goal of reducing its fleet's annual petroleum consumption by at least 20 percent by the end of FY 2005, compared to its FY 1999 petroleum use baseline. In preparing strategies, agencies should begin by determining a Petroleum Consumption Baseline for FY 1999, as explained in 2-2-1. Those who are preparing an agency's strategy may find it helpful to consult a companion guidance document being prepared by DOE, the *Federal Fleet Strategy Development Supplement for E.O. 13149*, which will be available in early September, 2000.

2-2-1 Petroleum Consumption Baseline Calculation

The agency's petroleum consumption for all non-exempt on-road light-, medium-, and heavy-duty vehicles in FY 1999 will serve as a baseline to measure petroleum consumption reductions achieved under E.O. 13149. To determine the FY 1999 baseline petroleum consumption figure, agencies must determine total gasoline and diesel fuel consumption less fuel consumption of exempt vehicles (military tactical, law enforcement and emergency vehicles). Agencies will then calculate 20 percent of that final baseline figure to determine the agency's annual petroleum reduction goal to be achieved by FY 2005.

Documentation of agency use is available from several sources. The Voyager card tracks vehicle fuel use for vehicles leased from GSA and this data can be obtained from GSA. For vehicles not leased through GSA, this information can be requested from the credit card vendor used by the agency. Most agencies will need to use both of these sources to determine the fuel usage for FY 1999. Additionally, each agency has been required to report fuel consumption information as part of its *Annual Report to Congress on Federal Government Energy Management and Conservation Programs* to the Federal Energy Management Program (FEMP), and agency owned vehicle information as part of GSA's SF-82 report. Agencies will continue to submit annual reports to FEMP as required, with one exception - all vehicle acquisition information reporting requirements will be satisfied using the on-line system developed by DOE in compliance with E.O. 13149, which will be further explained in section 2-3 of this guidance.

If an agency anticipates a substantial increase in its fleet size during the next five years, contact DOE's Federal Fleet AFV Program at (800) 254-6735 for guidance in establishing the baseline.

The *Federal Fleet Strategy Development Supplement for E.O. 13149*, available in September 2000, provides an example of a petroleum consumption baseline calculation, using data from the fleets of the Department of Energy.

2-2-2 Required Approaches to Petroleum Reduction

Two approaches to compliance shall be included in each agency's strategy, *unless* an agency can demonstrate why these approaches are not feasible for its particular situation and present viable alternate approaches that will be implemented. The two primary approaches are shown in Table 4, and are discussed in Sub-sections 2-2-2-1 and 2-2-2-2. Additional compliance options appear in Section 2-2-3.

Table 4. Two Primary Approaches for Achieving a 20% Petroleum Reduction

1. Acquisition of alternative fuel vehicles and use of alternative fuels
2. Acquisition of higher fuel economy vehicles

Table 5 is an example of the reduction in petroleum consumption using the two recommended performance strategies described in the following sections. This side-by-side comparison shows that by combining both of these approaches in its strategy, an agency should be able to achieve a significant reduction in petroleum use.

Table 5. An Example of Petroleum Displacement Achieved Using the Two Strategies

Petroleum Displacement by >50% Alternative Fuel Use	Petroleum Displaced by Increased Vehicular Fuel Economy
FY99 AFV sedan, rated at 26 miles/gallon	
Miles/year: 10,000	
Baseline fuel consumption: 385 gallons/year	
Target: >50% alternative fuel use in AFVs	Target: 29 miles/gallon
Target Petroleum Consumption: 192 gallons/year	Target Petroleum Consumption: 345 gallons/year
Petroleum Displacement: 193 gallons/year Percentage Displacement: 50%	Petroleum Displacement: 40 gallons/year Percentage Displacement: 10%
FY99 AFV full-size pick-up, economy: 20 miles/gallon	
Miles/year: 10,000	
Baseline fuel consumption: 500 gallons/year	
Target: >50% alternative fuel use	Target: 23 miles/gallon
Target Petroleum Consumption: 249 gallons/year	Target Petroleum Consumption: 435 gallons/year
Petroleum Displacement: 251 gallons/year Percentage Displacement: 50%	Petroleum Displacement: 65 gallons/year Percentage Displacement: 13%

2-2-2-1 Use of Alternative Fuels in Alternative Fuel Vehicles

Section 303 of the Energy Policy Act of 1992 (EPA) requires Federal agencies to acquire alternative fuel vehicles (AFVs) as 75 percent of the new light-duty vehicle acquisitions in “covered” fleets (i.e., covered under the provisions of EPA), in FY 2000 and beyond.

As one of the strategies to reduce petroleum consumption, E.O. 13149 requires agencies to use alternative fuels to meet a majority of the fuel requirement of its AFVs by the end of FY 2005 (see the definition of an alternative fuel in Appendix 2). Compliance with this requirement is reported over the entire agency rather than fleet by fleet. This allows the agency flexibility to decide which of its fleets are best suited to comply with the alternative fuel use measure as long as the entire agency fleet of AFVs meets the target.

As part of any program for alternative fuel use, agencies must consider the availability of infrastructure for fueling and maintaining AFVs. Agencies are encouraged to arrange for fueling at commercial or private facilities that offer alternative fuels for sale to the public. Suggested activities follow:

- Collaborating with state, local, and private entities to support the expansion and use of public-access, alternative fuel refueling stations (refer also to the Web site, www.afdc.doe.gov)
- Establishing non-public access alternative fuel infrastructure for fueling Federal fleets where public fueling is unavailable or inappropriate

- Working closely with DOE and GSA to resolve tracking issues related to alternative fuel usage with the alternative and petroleum fuel providers
- Collaborating with the Federal AFV Utilization Supporting Expansion of Refueling Program (AFV USER) participants, currently Albuquerque, Denver, Kennedy Space Center/Melbourne-Titusville, Minneapolis/St. Paul., Salt Lake City, and San Francisco Bay Area, (for those fleets located in those cities) to develop, expand and use alternative fuel infrastructure
- Cooperating with local Clean Cities Coalitions in efforts to expand the use of alternative fuel vehicles and to work together on infrastructure development projects

2-2-2-2 Acquisition of Higher Fuel Economy Vehicles

Under Section 202(b) of the Order, agencies shall increase the agency-wide fuel economy of new acquisitions of light-duty petroleum-fueled vehicles by at least 1 mile per gallon (mpg) by FY 2002, and by at least 3 mpg by FY 2005, compared with FY 1999 baseline acquisitions. In calculating the fuel economy requirement of the E.O., the entire agency's acquisitions of light-duty vehicles should be considered, subtracting out exempt (military tactical, law enforcement and emergency) vehicles and alternative fuel vehicles. Each agency will be annually reporting progress in achieving these goals in FY 2002 and FY 2005. See Table 6 for an example of how to calculate average fuel economy of agency's non-exempt light-duty acquisitions.

Under EPO, 75 percent of the agency's covered fleet acquisitions are required to be alternative fuel vehicles. This means the agency can consider the acquisition of light-duty vehicles (LDVs) with a higher DOE/EPA combined fuel economy rating for that portion of its fleet that will be fueled by conventional fuels. (See Appendix 2 for a definition of fuel economy rating.)

There are several other methods available to agencies to increase the fuel economy of its future acquisitions. These include the following:

- **Acquisitions of vehicles with substantially higher fuel economy.** Agencies are encouraged to acquire high-efficiency hybrid vehicles when available and appropriate for its fleet make-up, although petroleum hybrids available today do not count as AFVs. (Agencies need to check with DOE if they are considering the use of hybrids as AFVs to determine if the specific hybrids involved are considered to be AFVs by DOE.) Current models offer higher fuel economy than conventional vehicles, and future hybrids are expected to have even greater fuel economy. Hybrids are not available at this time through GSA contracts and overall availability of hybrids from outside sources is also limited. Thus, an agency's strategy should not presently rely too heavily on the use of these types of vehicles, although DOE anticipates greater availability by Model Year 2003.

- **Substitution of more efficient types of vehicles.** There may be significant opportunities for fleets to improve fuel economy through actual substitution of vehicle classes, for example, replacing light-duty trucks with sedans or minivans, or four-wheel-drive vehicles with two-wheel-drive vehicles. These substitutions and requiring fleets to choose the smallest engine available in a vehicle allows a fleet to increase its fuel efficiency and offer the agency a sensible solution to its needs. Although it requires a slight adjustment in the fleet make-up, this change will help meet the goals of E.O. 13149.

The baseline figure for fuel economy is based on 1999 light-duty vehicle *acquisitions*, not the entire 1999 vehicle inventory of the agency. Similarly, fuel economy goals of 1 mpg by 2002 and 3 mpg by 2005 only apply to *new acquisitions* in those years. To determine the average fuel economy rating of 1999 acquisitions based on the DOE/EPA fuel economy ratings, agencies must compile the total number of vehicles acquired in that fiscal year, segregated by make, model, and engine size. (See Table 6).

DOE will develop a worksheet to assist each agency in calculating its light-duty vehicle acquisition fuel economy information, using the DOE/EPA fuel economy rating for each vehicle model. For vehicles not listed in the worksheet, the fuel economy must be entered manually. (See also the instructions on reporting, in Section 3-0 of this guidance document.). The complete fuel economy guide is published every October and also may be found on line at www.fueleconomy.gov. Since the fuel economy calculation is measured on an agency-wide basis and not on a per-vehicle or per-fleet basis, agencies will be able to choose the best approach to achieving the required increases in fuel economy.

Table 6. Calculation of a Fleet's Average Fuel Economy

<ul style="list-style-type: none"> • Break down annual acquisitions by make, model and engine size (indicating quantity) • Obtain combined fuel economy rating for each type of vehicle (use equation to incorporate city fuel economy and highway fuel economy) • Calculate total combined fuel economy rating • Harmonically average combined fuel economy to determine the average fuel economy 							
Example:							
(a) Make	(b) Model	(c) Engine Size	(d) No. of Vehicles	(e) City F.E.	(f) Highway F.E.	(g) Combined F.E. (See Note)	(h) No. of Vehicles (d) Combined F.E. (g)
Ford	Taurus	6 cyl.	10	19	28	23	0.43478
Dodge	Intrepid	6 cyl.	1	20	29	23	0.00434
Chevy	1500 (2X4)	8 cyl.	5	16	21	18	0.27777
Totals			16				0.71689
Total Number of Vehicles = 16							
Total Combined Fuel Economy by Number of Vehicles = 0.71689							
Harmonically Average to get Average Fuel Economy of Fleet:							
Average Fuel Economy (F.E.) of Fleet = $\frac{\text{Total No. of Vehicles (total of column d)}}{\text{No. of Veh./Comb. F.E. (total of column h)}} = \frac{16}{0.71689} = 22.3$							
Note: To calculate the combined fuel economy :							
$\frac{1}{1 \times (.55)/\text{City FE} + 1 \times (.45)/\text{Hwy FE}} = \text{Combined F.E.}$							

2-2-3 Optional Approaches to Petroleum Reduction

Each agency must meet all the requirements of Executive Order 13149, but to do so, may adopt any combination of the required and optional approaches discussed in this *Guidance Document*, or develop an alternate approach of its own. If an agency chooses not to implement one or both of the required approaches to compliance, it must devise alternate approaches for achieving the goals of the Executive Order, and submit the proposed approaches and supporting documentation to DOE by October 2, 2000, for review prior to the October 18, 2000 deadline for strategy submission.

Alternate approaches must be described in detail and accompanied by supporting data sufficient to demonstrate how the alternate approaches contribute to achieving the 20 percent reduction in annual petroleum use by FY 2005. (See Section 2-2-5, Special Instructions, for general guidance on submitting strategic plans.)

Optional approaches include but are not limited to those shown in Table 7.

Table 7. Optional Approaches to Agencies for Achieving a 20% Reduction in Petroleum Use

• The use of alternative fuels in medium- and heavy-duty vehicles
• An increase in vehicle load factors
• A decrease in vehicle miles traveled (VMT)

Each optional approach is described in turn in the following paragraphs:

- **The use of alternative fuels in medium- and heavy-duty vehicles.** Use of alternative fuels in medium- and heavy-duty vehicles (greater than 8,500 pounds) can be a particularly successful approach for displacing significant amounts of petroleum because these vehicles typically use far more fuel per mile traveled than light-duty vehicles. In addition, they are centrally fueled and are often assigned to a particular location or garaged in a common area, making them good candidates for alternative fuels. This includes the use of biodiesel in diesel-powered vehicles, which also generates an AFV acquisition credit under EPAct for every 450 gallons of pure biodiesel used in blends of at least 20 percent biodiesel.
- **An increase in vehicle load factors.** Utilizing vehicles more efficiently will allow fleets to perform more effectively. For example, if an agency finds that a 10-passenger van typically carries only 5 passengers, the agency should consider increasing the number of routes or reducing the size of the vehicle. This example could be applied to all vehicular sizes, including light-duty pick-up trucks. Although an increase in vehicle load factors will be a small part of any agency's strategy, the key point is to accomplish the maximum amount of work with each vehicle. An added benefit is that smaller vehicles tend to have lower procurement and operating costs.

- **A decrease in vehicle miles traveled (VMT).** A fleet may be able to reduce its petroleum consumption by reducing the miles traveled by many of its vehicles. For example, agencies may choose to decrease the number of vehicles traveling to nearby locations by combining the trips using only one vehicle. Drivers should be encouraged to conduct their operations efficiently, for example, by timing trips to avoid rush hour. Encouraging employees to take advantage of teleconferencing or to use mass transit when attending meetings are other examples of how agencies could reduce the VMT of its fleets.

2-2-4 Management Approaches To Achieving the Goal of E.O. 13149

An agency can consider additional management measures to include in its strategic plan for implementing the E.O. For example, agencies may create employee incentive programs to reward exceptional performance, dedication, and leadership in executing resourceful solutions to achieve the goals of this Order.

Performance evaluations could be modified to include measurement of an employee's effort for implementing the E.O., if deemed appropriate. The plan might include evaluations of officials such as agency heads, the senior-level official, fleet managers, fleet supervisors, and other relevant employees, in order to encourage optimal performance within the agency.

2-2-5 Guidelines for Strategy Development

When agency strategies are submitted to DOE for evaluation, sufficient detail and supporting data for each element of the strategy must be provided to show how the proposed strategy will achieve a 20 percent reduction in petroleum use by the methods chosen. Details in the written strategy should, for example, indicate the agency's goals and objectives from year to year.

For example, if an agency plans to achieve the majority of its petroleum-reduction goal by using alternative fuel in its AFVs, it will need to provide baseline figures for FY 1999, including agency-wide petroleum consumption, and the total number of existing alternative fuel and petroleum-fueled vehicles in its fleets. The agency also needs to identify the quantity of petroleum it plans to displace. When this data has been compiled, the agency must describe its strategy to reach the reduced level of consumption in its fleets. If an agency's fleets are already using more than 50 percent alternative fuel, or close to it, the agency should also provide baseline figures for alternative fuel use.

DOE recommends strongly each agency submit a draft copy of its strategy for evaluation prior to the October 18, 2000 due date for the final strategic plans. Sending a draft of the strategy and data by early October would be ideal. This will speed up the evaluation process and ensure that the final strategy has an excellent chance of being approved. Due to the review and reporting schedule required by OMB and the White House, no extensions to the October 18th deadline can be granted. Table 8 shows the types of data that should be submitted with the strategy. A guidebook, *Federal Fleet Strategy Development Supplement*, will be available in early September 2000, to assist agencies with preparing E.O. 13149 strategies. In addition, tools and

information offered by the U.S. DOE's Clean Cities Program and local fuel providers (such as utilities) may be useful (see Appendix 1).

Table 8. Data Required In Draft and Final Strategic Plans

• Baseline Year (1999) petroleum fuel usage
• Baseline Year light-duty vehicle acquisition fuel economy (mpg)
• Number of agency vehicles
• Number of alternative fuel vehicles
• Alternative fuel usage
• Strategy and supporting information for achieving the 20 percent petroleum reduction requirement

Strategies and supporting information are to be forwarded to the U.S. Department of Energy, Office of Transportation Technologies, Energy Efficiency and Renewable Energy, EE-34, 1000 Independence Avenue, S.W., Washington, D.C. 20585, fax: (202) 586-1610, Attention: Shab Fardanesh. Electronic versions are welcome, and can be emailed to shabnam.fardanesh@ee.doe.gov.

2-3 Annual Reporting Requirements and the FAST Tracking System

Executive Order 13149 authorizes Office of Management and Budget (OMB) and DOE to collect information each year to measure each agency's progress in achieving a 20 percent reduction in annual petroleum consumption. The tools and information needed by the agencies to report annual progress toward meeting the requirements of E.O. 13149 include the following:

- DOE's Federal Automotive Statistical Tool (FAST)
- Federal fleet Combined Fuel Economy Worksheet¹
- Data on all vehicles acquired by the agency, segregated by make, model, year, engine size (number of cylinders)
- *Federal Fleet Data Reporting Supplement* (available September 2000)

As mentioned earlier, reports for the fiscal year are due to DOE no later than November 1 after the end of the fiscal year (using the data collected on the FAST tracking system). By November 1, 2000, agencies will have to report petroleum consumption and fuel efficiency information for FY 1999 to establish the baseline, as well as fuel use and vehicle information for FY 2000, and vehicle acquisition plans for FY 2001 and FY 2002. The designated senior-level agency official is responsible for signing off on the report prior to its submission to DOE.

¹ DOE will develop a worksheet to assist each agency in calculating its light-duty acquisition fuel economy. The worksheet will require the input of the quantity of all light-duty vehicles acquired by each agency, segregated by make, model, year, and engine size (number of cylinders).

To facilitate the tracking of vehicle acquisitions and fuel use, DOE has established an on-line reporting system named Federal Automotive Statistical Tool (FAST). The system has the ability to store and track all data entered by the agencies, and can also be considered a useful management tool for agency fleets. Agencies will use the FAST system to collect the data and aggregate the information needed to be submitted with the written report to DOE (see 2-3-3).

The FAST tracking system provides a convenient format for all Federal fleets to use in preparing progress reports toward meeting the goals of the Order while providing DOE with flexibility in analyzing and presenting the data to OMB, the White House, and Congress in the various reporting formats necessary. In addition, FAST will collect and process data for SF-82 reporting, beginning with FY 2000.

2-3-1 Obtaining Access to FAST

Access to the FAST on-line reporting system will be established for all senior-level agency officials on record. Some agencies may wish to provide this access to other representatives who are designated by the senior-level official to work on the agency's compliance with the Order. An access code to FAST may be obtained for these individuals by contacting Shab Fardanesh, Program Manager for the Federal Fleet Program, through e-mail at: shabnam.fardanesh@ee.doe.gov. Be sure to provide the representative's name, title, e-mail address, telephone number, and department.

FAST is customized to fit the hierarchical needs of each agency. Typically, most agencies will report on a pyramid level, starting with the fleet manager entering the raw data. The report will automatically move forward to the next level, until it reaches the senior-level official in charge of this program at the agency's headquarters. At each level, reviewers may only change data at their level or for the level(s) directly below them. Once the senior-level agency official has approved the report, it will be sent to DOE headquarters for evaluation and then forwarded to OMB.

2-3-2 Components of a FAST Report

If agencies have vehicles in more than one location, ***a complete, separate data set must be entered in FAST for each geographically separate fleet.*** FAST then collects this fleet by fleet data and aggregates it into one agency-wide report. The following information is required for each location:

- **Fleet Profile Header.** Contact information for the site fleet manager, the submitting official, the regional representative, and the bureau representative (or other appropriate structure) are provided in this portion, along with basic site information such as fleet location. Once the reporting data has been successfully entered and approved by the fleet manager, the report is electronically transmitted to the next level. This "layered" process continues until the report finally reaches agency headquarters for final review and approval. Combined, the fleet profiles are used to establish an agency's fleet structure.
- **Vehicle Data.** Data on all acquisitions of alternative fuel, gasoline, and diesel vehicles must be reported on this system for the previous, current, and following year's vehicle acquisitions

(e.g., FY 2000 actual, FY 2001 planned, and FY 2002 projected acquisitions). To facilitate data entry the system provides a list of vehicles available to the Federal fleet in the current fiscal year. In addition, columns are provided for inputting the number of vehicles and the total of each vehicle type in the fleet's inventory for the previous fiscal year.

- **Fuel Consumption.** Data on fuel consumption of all types, including gasoline, diesel, and all alternate fuels, is reported for each location. Fuel consumption by non-exempt and exempt vehicles should be identified. The best way to obtain good data for alternative fuel use is to have fleets provide the data. Another way to collect data on gasoline and diesel fuel use is to obtain the agency's petroleum fuel use data submitted for the Federal Energy Management Program's (FEMP's) *Annual Report to Congress on Federal Government Energy Management and Conservation Programs*. Quantities of fuel used should be reported in natural units and will then be converted automatically to gasoline gallon equivalents (gge) by FAST.

TIP: *Enter alternative fuel data by fleets. However, it will probably be more accurate for the agency head to enter aggregate data on gasoline and diesel consumption across the agency.*

2-3-3 Submission of Annual Report

By November 1st, each agency must submit to DOE the agency's data report for the prior fiscal year, and a written statement of how it is meeting the requirements of the E.O.. The FAST system collects and aggregates the data for this report. Prior to its final submission, reviewers within the agency will have the ability to go on-line and view the latest data entered in the FAST system. When the FAST report has been finalized and approved within the agency, a hard copy of the final version shall be forwarded to DOE along with a written statement on the agency's progress towards compliance. If an agency is falling behind in accomplishing its plans, a change to the original strategy may be needed.

2-3-4 Accountability

DOE, using data submitted by the agencies will prepare a scorecard on the annual reports of the agencies. This scorecard will be sent to the Office of Management and Budget, White House, and Congress, and will be posted on the Internet.

3-0 Applicability of the Executive Order

As already stated, Section 201 of the Executive Order applies to all agencies operating 20 or more motor vehicles within the 50 states and the District of Columbia. Independent agencies and agencies with fewer than 20 vehicles are exempted from coverage; however, they are encouraged to comply with the provisions of this Order.

Agencies must ensure that all Government-owned, contractor-operated vehicles and facilities comply with the applicable goals of this Order. These requirements and goals should be included in each contractor's management contract.

3-1 Exemptions and Classes of Exempt Vehicles

Each agency claiming vehicle exemptions under the E.O. must provide information in its annual report to DOE and OMB on the number of each class or type of vehicle claimed as exempt, along with an estimate of the total annual fuel consumption of exempt vehicles. Exempt vehicles fall into several classes:

- Military tactical vehicles
- Law enforcement vehicles
- Emergency vehicles
- Any other class or type of vehicle that OMB determines to be exempt from this Order

There are significant difference between exemptions under EPAct and the Executive Order. Under EPAct, 75 percent of new covered LDV acquisitions must be alternative fuel vehicles, but this requirement applies only to vehicles operated within Metropolitan Statistical Areas (MSAs) with a population of 250,000 or more. Vehicles located outside of these MSAs are geographically exempt from EPAct requirements for AFVs. *Military tactical, law enforcement, and emergency vehicles* are also excluded from EPAct requirements.

Under Executive Order 13149, only military tactical, law enforcement and emergency vehicles are exempt from the requirements, and the fleet, less these exemptions, has to satisfy the Order's requirement of a 20 percent reduction in petroleum use. There is no geographic exemption from the requirements of E.O. 13149.

A more complete description of law enforcement and emergency vehicles is provided in Appendix 2.

3-2 Vehicle Credits for EPAct Compliance

Agencies will earn one AFV acquisition credit toward EPAct compliance for each AFV acquisition, regardless of geographic placement or exemption status. To maintain the emphasis on actual alternative fuel use, dedicated and electric vehicles will receive additional credits. Because dedicated alternative fuel medium- and heavy-duty vehicles multiple credits are earned for these vehicles, displace more petroleum and reduce more emissions on a per mile basis compared to light-duty vehicles. Credits will be earned as shown in Table 9.

Table 9. Credits Earned toward EPOct Compliance

Credits Awarded	Situation Earning Credits
1	A light-duty, alternative fuel vehicle
2	A dedicated light-duty vehicle
3	A dedicated medium-duty, alternative fuel vehicle
4	A dedicated heavy-duty, alternative fuel vehicle
1	For every 450 gallons of pure biodiesel (equivalent to 2,250 gallons of B-20) used in diesel vehicles with earned credits of up to 50 percent of EPOct requirements only.

Note: Extra EPOct AFV credits do not count as AFVs when agencies are calculating alternative fuel use to meet the requirement of Section 202(a) of the Order.

3-3 Compliance

If an agency fails to meet the requirements of Executive Order 13149 and/or EPOct, its report to the Department of Energy and the Office of Management and Budget must include an explanation for such failure. An updated strategy for achieving compliance using the agency's current and requested budgets will also be required of an agency that has not met the requirements.

However, an agency that has made substantial good-faith efforts to acquire and use alternative fuel vehicles and alternative fuels, but finds it is unable to comply with the requirements of the Order, may request that its compliance requirements be modified. OMB, in consultation with DOE, may agree to this modification. The availability and costs of AFVs and alternative fuels to the agency can be factors in OMB's decision.

4-0 General Provisions

There are several general provisions included in Executive Order 13149:

- **Revocation.** This Order supersedes section 9 and 10 of Executive Order 12759 of April 17, 1991. Executive Order 13031 of December 13, 1996, is revoked.
- **Statutory Authority.** Agencies must carry out the provisions of this Order to the extent consistent with its statutory authority.
- **Limitations.** This Order is intended only to improve the internal management of the Executive branch and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any other person.

5-0 Specific Agency Responsibilities

As mentioned in 2-1, certain duties are assigned to other Federal agencies to support the primary goal of this Order. These agencies include the Office of Management and Budget, the Department of Energy, the Environmental Protection Agency, and the General Services Administration. The respective duties of these agencies are summarized in the next four sub-sections.

5-1 Duties of the Office of Management and Budget

- Shall designate a senior official to assume the responsibility for coordinating the collection of agency budget and data submissions pursuant to this Order;
- Amend and issue budget guidance to the agencies that require s each agency to identify in its annual budget submission the funding necessary to meet the requirements of this Order;
- Review annual agency budget submissions to determine adequacy in meeting the goal of this Order and to balance requests for increased funding to support achievement of the goals against other mission priorities for the agency; and
- Review agency submissions for the annual report to Congress, after budget decisions are made.

5-2 Duties of the Department of Energy

- Issue guidance on strategy development, data reporting, and overall compliance with the requirements of this Order to Federal agencies, within 90 days of its issuance.
- Review and evaluate agency strategies prior to final submission to OMB.
- Provide OMB copies of evaluations of agency strategies.
- Provide whatever additional support OMB requires to facilitate its role.

- Establish a data collection and reporting system to be used by all Federal agencies to demonstrate the agency's performance in meeting the goals of this Order.
- Educate other agencies on the requirements of this Order.
- Review agencies' annual data submissions for accuracy and produce a scorecard of agencies' and overall Federal compliance with this Order and other applicable statutes and policies.
- Report annually to the President, to OMB, and to Congress on the agencies' compliance with this Order, including the scorecard and level of performance in meeting its strategies; the report will also be posted on DOE's Web site.

5-3 Duties of the Environmental Protection Agency

- Lend support to DOE and GSA to help agencies acquire lower-emitting Tier II vehicles pursuant to availability (see Appendix 2 for a definition of Tier II vehicles; further information is available at www.epa.gov/OTAQ).

5-4 Duties of the General Services Administration

- Work with agencies to discuss and plan efforts to ensure that GSA-leased fleets demonstrate progress towards achieving the goals of this Order.
- Develop and implement strategies to ease the financial and administrative burdens of agencies associated with the acquisition of AFVs. Options should include:
 - Pay the incremental costs associated with AFV acquisition with a lump sum payment for current acquisitions and pay for future incremental costs over the term of the lease of the current vehicle.
 - Spread the incremental costs for future AFVs throughout the entire fleet over 12 months. This will allow agencies to pre-pay the incremental costs of planned acquisitions.
 - Spread the current AFV incremental costs over the agency's entire fleet for a period of 12 months through a surcharge added to each vehicle's lease rate.
- Provide a summary of the agency's AFV acquisition plans to potential AFV manufacturers by August 19, 2000, to assist agencies with its production planning. GSA shall provide agencies with a list of available information on production plans at least four (4) months prior to the agency's ordering cycle.
- Develop methods that will help Federal agencies acquire fuel-efficient and Tier II vehicles with the assistance of DOE and EPA.
- Assist agencies with data needs.

6-0 Environmental Considerations

Section 403 requires agencies to consider the environmental effects of various motor vehicle products and low-emission vehicles, and adjust procurement practices to encourage the use of environmentally preferable motor vehicle products.

6-1 Green Products

Consistent with Executive Order 13101 and Section 6002 of the Resources Conservation and Recovery Act, agencies are encouraged to acquire environmentally friendly motor vehicle products as long as such products are reasonably available and meet the vehicle manufacturer's recommended performance standards. Details include the following:

- Effective October 21, 2000, no Federal agency shall purchase, sell, or arrange for the purchase of virgin petroleum motor vehicle lubricating oils when re-refined motor vehicle lubricating oils are reasonably available and meet the manufacturer's recommended performance standards.
- Agencies shall acquire and use EPA-designated Comprehensive Procurement Guideline items, including, but not limited to, retread tires as well as other recycled-content products such as tires containing a minimum of 5 to 10 percent post-consumer recovered rubber.
- Federal agencies are encouraged to use biobased motor vehicle products when they are reasonably available and meet applicable performance standards.

6-2 Tier II Vehicles

The U.S. Environmental Protection Agency (EPA) has recently set significantly lower emissions standards for vehicles. These new regulations will result in the production of cleaner "Tier II vehicles." Light-duty Tier II vehicles will be phased in between 2004 and 2007; the phase-in of medium- and heavy-duty vehicles will begin in 2009. The new standards also call for lower sulfur levels in gasoline. It is highly recommended that Federal fleets consider the acquisition of these cleaner vehicles, as they become available. More information on Tier II vehicles is available on the EPA web site at www.epa.doe.gov/OATQ.

Appendices

Appendix 1: Additional Resources

Resource	Type of Information Available	How to Contact
Energy Efficiency and Renewable Energy Network (EREN)	Range of information, from energy efficient and renewable energy technologies to the latest developments and news plus a listing of additional resources	1-800-363-3732 http://www.eren.doe.gov
National Alternative Fuels Hotline and Data Center	Information on all issues related to alternative transportation and fuel efficiency, and refueling and recharging sites	1-800-423-1DOE (1-800-423-1363) http://www.afdc.doe.gov
General Services Administration	Vehicle availability, including AFVs	GSA's Web site: pub.fss.gsa.gov/vehicles/
Fuel Economy Guide	Fuel economy data. The DOE/EPA fuel economy guide is published by DOE each August, including data on upcoming vehicle models	http://www.fueleconomy.gov
AFV USER Program	This program is creating a self-sustaining alternative fuel market by promoting infrastructure, currently in six (6) pilot program cities where Federal AFVs are concentrated.	http://www.ott.doe.gov/afvuser
<i>U.S. Department of Energy</i> Shab Fardanesh	Executive Order 13149 requirements, this guidance, agency compliance, or related matters	Office of Transportation Technologies, U.S. Department of Energy, EE-34, 1000 Independence Avenue, S.W., Washington, D.C. 20585 Federal Fleet Voicemail Tel: (800) 254-6735 Federal Fleet e-mail: fed_fleets@afdc.nrel.gov Direct Email: shabnam.fardanesh@ee.doe.gov
<i>National Renewable Energy Laboratory</i> Margo Melendez	Executive Order 13149 requirements, this guidance, agency compliance, the FAST reporting system, or related matters	National Renewable Energy Laboratory Federal Fleet Voicemail Tel: (800) 254-6735 Federal Fleet e-mail: fed_fleets@afdc.nrel.gov
<i>National Renewable Energy Laboratory</i> Greg Wilcox	The FAST tracking system	Federal Fleet Voicemail Tel: (800) 254-6735 Federal Fleet e-mail: fed_fleets@afdc.nrel.gov
INEEL	The FAST tracking system	Visit the online site, chris.inel.gov/FAST
U.S. DOE <i>Clean Cities</i> Program Hotline	Information on this voluntary Federal program whose mission is to accelerate and expand the use of AFVs.	1-800-CCITIES http://www.ccities.doe.gov

Appendix 2: Definitions

Acquisition – A vehicle acquired for a Federal fleet that is a (1) new purchase; (2) newly leased vehicle, whether leased through GSA or commercially; or a (3) leased vehicle that replaces an existing leased vehicle. Leased acquisitions are counted in the fiscal year in which they are ordered. For example, a vehicle that was ordered in FY 1999, but is delivered after October 1, 2000, will count as a FY 1999 acquisition. Used vehicles acquired through lease or purchase by an agency do not count as acquisitions.

Agency Owned Vehicle – A vehicle purchased by a Federal agency.

Alternative Fuel – Qualifying fuels include methanol, denatured ethanol, and other alcohols; mixtures containing 85 percent or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas (compressed or liquefied); liquefied petroleum gas (propane); hydrogen; coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials, including neat (100%) biodiesel and P-Series fuel; and electricity (including electricity from solar energy).

Alternative Fuel Vehicle (AFV) – A dedicated, flexible-fuel, bi-fuel, or dual-fuel vehicle powered by alternative fuel.

Automobile – See definition for motor vehicle.

Bi-Fuel Vehicle – A vehicle with two separate fuel systems designed to run on either an alternative fuel, or gasoline or diesel, using only one fuel at a time. Bi-fuel vehicles are referred to as “dual-fuel” vehicles in EPA Act.

Biodiesel – A biodegradable transportation fuel for use in diesel engines, which is produced through transesterification of animal, plant, or waste oils.

Consolidated Metropolitan Statistical Area (CMSA/MSA) – As used in the Energy Policy Act (EPA Act), geographical areas defined by the Bureau of Census that includes cities or combinations of multiple cities with large population concentrations. The Metropolitan Statistical Area (MSA) refers to geographical areas that generally include one city with a smaller population concentration. For Federal fleet EPA Act mandates for AFVs, use of the terms CMSA and MSA are limited by OMB to areas with a 1995 population of 250,000 or more, as determined by the Bureau of the Census.

Conventional Fuel Vehicle – A vehicle that is powered by an internal combustion engine that utilizes gasoline, reformulated gasoline, diesel fuel, or a biodiesel blend as its fuel source.

Dedicated Alternative Fuel Vehicle – A motor vehicle that is designed to operate solely on alternative fuel.

Designated Senior-Level Agency Official – A high level agency official, such as an Assistant Secretary (or equivalent-level official), designated by the head of each agency to carry out the responsibilities associated with the compliance of this Order, as well as other similar programs.

DOE – U.S. Department of Energy.

Dual-Fuel Vehicle – A motor vehicle with two separate fuel storage systems that operates on a mixture of alternative fuel and petroleum-based fuel.

Environmentally Preferable Motor Vehicle Product – Products required for the normal operation of a vehicle that have a limited impact on the environment because they are low-polluting, or have a recycled content, or are based on renewable resources. E.O. 13149 encourages Federal agencies to make use of re-refined lubricating oils, retread tires, tires containing post-consumer recovered rubber, and biobased products, wherever they are reasonably available and meet vehicle manufacturer specifications.

EPA – U.S. Environmental Protection Agency.

EIA – Energy Information Administration

EPAct – The Energy Policy Act of 1992.

FAST – Federal Automotive Statistical Tool, an on-line data collection reporting system established by DOE to track the vehicle acquisitions and fuel use of Federal fleets.

FEMP – Federal Energy Management Program

Federal Agency – Any executive department, military department, government corporation or Government controlled corporation, or other establishment in the executive branch of the government.

Flex-Fuel (or Flexible-Fuel) Vehicle – A vehicle with a single fuel tank that is capable of operating on alternative fuel, petroleum fuel, or a mixture of the two.

Fuel Economy Rating (Guide) – A document that reports the fuel economy of the various makes and models of passenger cars and light trucks. EPA collects the data and DOE publishes and distributes the guide each October. A worksheet based on this document is available on the FAST tracking system to help each Federal agency calculate the average fuel economy of its fleets for its annual reports to DOE, required under E.O. 13149.

GSA – General Services Administration.

GVWR – Gross Vehicle Weight Rating; the weight of a vehicle, including payload.

Harmonic Average – The reciprocal of the arithmetic mean of the reciprocals of a set of fuel economy figures.

Heavy-Duty Vehicle – A vehicle weighing more than 16,000 lbs GVWR and certified for use on all public roads and highways.

Incremental Cost – The additional cost of acquiring an alternative fuel vehicle over a comparable conventionally fueled vehicle.

Independent Agency – Government establishments such as the National Science Foundation, that are not part of the executive branch of the government.

Law Enforcement/Emergency Vehicles – Those vehicles that have been fitted with emergency lights and a siren along with other modifications such as heavy-duty or high-performance suspensions and drive trains. This exemption also covers vehicles that may be used occasionally for the purpose of surveillance or undercover operations, or that will be transferred into law enforcement service in the future, as long as these vehicular models are not mass-produced (more than 25,000 annually) as alternative fuel vehicles and publicly purchased.

If a fleet is claiming any exemptions under these provisions, a brief explanation of the numbers and types of vehicles being exempted and the justification for using them should be provided to DOE (e.g., “50 mid-size sedans exempted because they provide protective services to embassies; 200 full-size sedans, minivans, and light trucks exempted for field agent and surveillance use.”) Note that the example provides adequate detail to justify the exemptions, while providing sufficient aggregation to prevent specific law-enforcement vehicles from being identified.

Leased Acquisition – A new or replacement vehicle acquired under a rental contract or similar arrangement.

Light-Duty Vehicle – A vehicle weighing 8,500 pounds GVWR or less. For the purposes of EPA reporting, light-duty vehicles are also general purpose vehicles, certified for use on all public roads and highways.

Medium-Duty Vehicle – A motor vehicle of more than 8,500 lbs and less than or equal to 16,000 lbs GVWR. For purposes of EPA reporting, medium-duty vehicles are also certified for use on all public roads and highways.

Military tactical vehicles – Motor vehicles acquired and used for purposes that the Secretary of Defense has certified to DOE must be exempt from this Order’s requirements for Federal fleet fuel efficiency and alternative fuel vehicle acquisitions, for reasons related to national security.

Motor Vehicle – A self-propelled vehicle that meets the definition of section 215(2) of the Clean Air Act (42 U.S.C. 7550(2)) and is fully Federal Motor Vehicle Safety Standards certified for operation on all public roads and highways, designed for transporting persons or property. (**Automobile** means a 4-wheeled vehicle propelled by conventional fuel, or by alternative fuel, manufactured primarily for use on public streets, roads, and highways.)

OMB – Office of Management and Budget.

Submitting Official – The official at the operations or regional office level who is responsible for the data for a particular fleet.

Site Zip Code – The zip code for the geographic area in which a fleet is primarily operated.

Tier II – EPA's new emission standard to control air pollution from motor vehicles. A single average exhaust emission standard will be phased in to cover both passenger cars and light-duty trucks that operate on any fuel. Under this standard, refiners are also required to produce lower-sulfur gasoline. Agencies should consider adding Tier II vehicles to its fleets when they become available. The Web site, www.epa.gov/OATQ, contains additional information on the Tier II standard.

Appendix 3:

Timetable for Implementation of Executive Order 13149

Date	Required Action
April 21, 2000	<ul style="list-style-type: none"> Executive Order signed by President Clinton
July 20, 2000	<ul style="list-style-type: none"> DOE issues <i>Executive Order 13149: Greening the Government through Federal Fleet and Transportation Efficiency, Guidance Document for Federal Agencies</i> Agencies submit name and contact information for senior official responsible for Order
August 2000	<ul style="list-style-type: none"> GSA provides replacement information and vehicle availability to fleets
August 19, 2000	<ul style="list-style-type: none"> GSA provides information to manufacturers regarding potential AFV acquisition plans of the federal fleet GSA works with EPA, DOE, and fleets to assist with selection of fuel-efficient vehicles
September 2000	<ul style="list-style-type: none"> DOE publishes the <i>Federal Fleet Strategy Development Supplement</i> DOE publishes the <i>Federal Fleet Data Reporting Supplement</i>
October 2000	<ul style="list-style-type: none"> Fuel economy guide published
October 2, 2000	<ul style="list-style-type: none"> DOE puts FAST database on-line, available for data entry Agencies considering alternate approaches to E.O. compliance submit proposed approaches to DOE for review
October 18, 2000	<ul style="list-style-type: none"> Agency officials submit the agency strategy to DOE for approval
October 21, 2000	<ul style="list-style-type: none"> Agencies are required to purchase re-refined vehicle motor oils
November 1, 2000	<ul style="list-style-type: none"> FAST reporting period ends: all agency data for FY 2000 must be entered into FAST system annual report and submitted to DOE

Appendix 4: Executive Order 13149

EXECUTIVE ORDER:

GREENING THE GOVERNMENT THROUGH FEDERAL FLEET AND TRANSPORTATION EFFICIENCY

April 21, 2000

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Energy Policy and Conservation Act, as amended (42 U.S.C. 6201 et seq.), the Energy Policy Act of 1992 (Public Law 102-486), section 301 of title 3, United States Code, and the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388), it is hereby ordered as follows:

PART 1 PREAMBLE

Section 101. Federal Leadership. The purpose of this order is to ensure that the Federal Government exercises leadership in the reduction of petroleum consumption through improvements in fleet fuel efficiency and the use of alternative fuel vehicles (AFVs) and alternative fuels. Reduced petroleum use and the displacement of petroleum by alternative fuels will help promote markets for more alternative fuel and fuel efficient vehicles, encourage new technologies, enhance the United States' energy self-sufficiency and security, and ensure a healthier environment through the reduction of greenhouse gases and other pollutants in the atmosphere.

Sec. 201. Reduced Petroleum Fuel Consumption . Each agency operating 20 or more motor vehicles within the United States shall reduce its entire vehicle fleet's annual petroleum consumption by at least 20 percent by the end of FY 2005, compared with FY 1999 petroleum consumption levels.

Sec. 202. Performance Strategies. Agencies have numerous options for developing a strategy to meet the petroleum reduction levels established in section 201 of this order. Measures include: the use of alternative fuels in light, medium, and heavy-duty vehicles; the acquisition of vehicles with higher fuel economy, including hybrid vehicles; the substitution of cars for light trucks; an increase in vehicle load factors; a decrease in vehicle miles traveled; and a decrease in fleet size. Each agency will need a strategy that includes most, if not all, of these measures, but can develop a strategy that fits its unique fleet configuration and mission requirements. As part of the strategy, each agency should attempt to accelerate the introduction of vehicles meeting Tier 2 standards. Where feasible, agencies should also consider procurement of innovative vehicles, such as hybrid electric vehicles, capable of large improvements in fuel economy. The strategy should also attempt to minimize costs in achieving the objectives of this order. In developing its strategy, each agency shall include the following:

- (a) AFV Acquisition and Use of Alternative Fuels. Each agency shall fulfill the acquisition requirements for AFVs established by section 303 of the Energy Policy Act of 1992. Agencies shall use alternative fuels to meet a majority of the fuel requirements of those motor vehicles by the end of FY 2005. Section 402 of this order addresses related issues of alternative fuel infrastructure availability and the ability to track alternative fuel usage data; and
- (b) Acquisition of Higher Fuel Economy Vehicles. Agencies shall increase the average EPA fuel economy rating of passenger cars and light trucks acquired by at least 1 mile per gallon (mpg) by the end of FY 2002 and at least 3 mpg by the end of FY 2005 compared to FY 1999 acquisitions.

Sec. 301. Leadership Responsibilities. The Office of Management and Budget (OMB), the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the General Services Administration (GSA) shall be responsible for providing leadership to the other Federal agencies in implementing programs to meet the goals of this order. Therefore, they shall perform the following activities:

(a) OMB shall:

(1) designate a senior official to assume the responsibility for coordinating the collection of agency budget and data submissions pursuant to this order;

(2) amend and issue budget guidance to the agencies that requires each agency to identify in its annual budget submission the funding necessary to meet the requirements of this order;

(3) review annual agency budget submissions to determine adequacy in meeting the goal of this order and to balance requests for increased funding to support achievement of the goals against other mission priorities for the agency; and

(4) review agency submissions for the annual report to the Congress, after budget decisions are made.

(b) DOE shall:

(1) issue guidance to agencies, within 90 days of the issuance of this order, on preparation and submission of agency strategies of complying with this order and the collection and annual reporting of data to demonstrate compliance with this order;

(2) review and evaluate agency strategies prior to their submission to OMB;

(3) provide OMB with copies of the agency strategy evaluations;

(4) provide whatever other support OMB requires to facilitate performance of OMB's role;

(5) establish the data collection and reporting system outlined in the DOE guidance for collecting annual agency performance data on meeting the goals of this order and other applicable statutes and policies;

(6) educate personnel from other agencies on the requirements of this order, the data collection and reporting system, best practices for improving fleet fuel efficiency, and methods for successfully acquiring and using AFVs;

(7) review agencies' annual data submissions for accuracy and produce a scorecard of agency and overall Federal compliance with this order and other applicable statutes and policies; and

(8) report to the President annually on compliance with the order, including the scorecard and level of performance in meeting the goals of the agencies' strategies.

(c) EPA shall support DOE and GSA in their efforts to assist the agencies in the accelerated purchase of Tier 2 vehicles.

(d) GSA shall develop and implement strategies that will ease agencies' financial and administrative burdens associated with the acquisition of AFVs, including:

(1) Agencies shall be allowed to replace their conventionally-fueled vehicles with AFVs by making an initial lump-sum payment for the additional acquisition cost of the AFV and shall be allowed to contribute to the higher replacement costs of the AFV incrementally over the term of the lease, and have the option of averaging AFV incremental costs across the agency fleet as provided by the Energy Policy Act of 1992.

(2) Within 120 days of this order, the Administrator of GSA, in consultation with other agencies, shall:

(A) provide a summary of agency AFV acquisition plans to potential AFV manufacturers to assist in their production planning. At least 4 months in advance of agency vehicle ordering cycles, GSA must provide to agencies the best available information on the production plans of AFV manufacturers;

(B) develop, in coordination with DOE and EPA, methods that will help Federal fleet managers to select vehicles to improve fleet fuel efficiency and to meet Tier 2 vehicle standards; and

(C) collaborate with its customer agencies and their procurement staff and officials to discuss and plan efforts to ensure that the GSA-leased fleet is making progress toward the goals of this order.

Sec. 302. Designation of Senior Agency Official. Within 90 days of the date of this order, the head of each agency shall designate a senior official to assume responsibility for the agency's AFV and fleet fuel efficiency programs, and for meeting the requirements of this order. Each senior agency official designated by an agency shall be responsible for:

(a) preparing an agency strategy for meeting the goals of this order, in accordance with guidance issued by DOE;

(b) submitting the agency strategy to DOE within 180 days of the issuance of this order for evaluation and submission to OMB;

(c) implementing the data collection and reporting system outlined in the DOE guidance for collecting annual agency performance data on meeting the goals of this order and reporting the data to DOE;

(d) ensuring the agency's strategy for meeting the goals of this order is incorporated in the annual budget submission to OMB; and

(e) assembling the appropriate team and resources in the agency necessary to attain the goals of this order.

Sec. 303. Management and Government Performance. Agencies may use the following management strategies to assist them in meeting the goals of this order:

(a) Awards. Agencies may use employee incentive programs to reward exceptional performance in implementing this order.

(a) Performance Evaluations. Agencies shall, where appropriate, include successful implementation of the provisions of this order in the position descriptions and performance evaluations of agency heads, the senior official, fleet managers, their superiors, and other relevant employees.

Sec. 304. Applicability. This order applies to each agency operating 20 or more motor vehicles within the United States. Agency means an executive agency as defined in 5 U.S.C. 105. For the purpose of this order, military

departments, as defined in 5 U.S.C. 102, are covered under the auspices of the Department of Defense.

Sec. 401. Vehicle Reporting Credits. When preparing the annual report to DOE and OMB, each agency acquisition of an alternative fuel light-duty vehicle, regardless of geographic placement, shall count as one credit towards fulfilling the AFV acquisition requirements of the Energy Policy Act of 1992. Agencies shall receive one additional credit for each light-duty AFV that exclusively uses an alternative fuel and for each Zero Emission Vehicle of any size. Agencies shall receive three credits for dedicated medium-duty AFVs and four credits for dedicated heavy-duty AFVs. Agencies can also receive one credit for every 450 gallons of pure bio-diesel used in diesel vehicles.

Sec. 402. Infrastructure. To support the use of alternative fuel in AFVs, agencies should arrange for fueling at commercial facilities that offer alternative fuels for sale to the public.

(a) Agencies should team with State, local, and private entities to support the expansion and use of public access alternative fuel refueling stations;

(b) Agencies should use the authority granted to them in section 304 of the Energy Policy Act of 1992 to establish nonpublic access alternative fuel infrastructure for fueling Federal AFVs where public fueling is unavailable.

(c) Agencies are encouraged to work with DOE and GSA to resolve alternative fuel usage tracking issues with alternative and petroleum fuel providers.

Sec. 403. Procurement of Environmentally Preferable Motor Vehicle Products.

(a) Consistent with Executive Order 13101 and section 6002 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6962, effective 6 months after the date of this order, no Federal agency shall purchase, sell, or arrange for the purchase of virgin petroleum motor vehicle lubricating oils when re-refined motor vehicle lubricating oils are reasonably available and meet the vehicle manufacturer's recommended performance standards.

(b) Consistent with Executive Order 13101 and RCRA section 6962, in acquiring and maintaining motor vehicles, agencies shall acquire and use United States EPA-designated Comprehensive Procurement Guideline items, including but not limited to retread tires, when such products are reasonably available and meet applicable performance standards. In addition, Federal agencies should consider acquiring other recycled content products, such as tires containing a minimum of 5-10 percent post-consumer recovered rubber.

(c) Consistent with Executive Order 13101, Federal agencies are encouraged to use biobased motor vehicle products when such products are reasonably available and meet applicable performance standards.

Sec. 501. Revocation. Executive Order 13031 of December 13, 1996, is revoked.

Sec. 502. Statutory Authority. Agencies must carry out the provisions of this order to the extent consistent with their statutory authority.

Sec. 503. Limitations. This order is intended only to improve the internal management of the executive branch and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any other person.

Sec. 504. Independent Agencies. Independent agencies and agencies excepted from coverage by section 304 are encouraged to comply with the provisions of this order.

Sec. 505. Government-Owned Contractor-Operated Vehicles. Agencies must ensure that all Government-owned contractor-operated vehicles comply with all applicable goals and other requirements of this order and that these goals and requirements are incorporated into each contractor's management contract.

Sec. 506. Exemptions for Military Tactical, Law Enforcement, and Emergency Vehicles. Department of Defense military tactical vehicles are exempt from this order. Law enforcement, emergency, and any other vehicle class or type determined by OMB, in consultation with DOE, are exempted from this order's requirements for Federal fleet fuel efficiency and alternative fuel vehicle acquisition. Agencies claiming vehicle exemptions must provide information on the number of each class or type of vehicle claimed as exempt as well as an estimate of total fuel consumption of exempt vehicles on an annual basis. Agencies should examine options for increasing fuel efficiency in these exempt vehicles and should report actions taken to increase fuel efficiency in these vehicles or fleets. All information required by this section must be submitted annually under Part 3 of this order.

Sec. 507. Compliance. (a) If an agency fails to meet requirements of the Energy Policy Act of 1992 or this order, its report to the DOE and OMB under section 302(c) must include an explanation for such failure and an updated strategy for achieving compliance using the agency's current and requested budgets.

(b) OMB, in consultation with DOE, may modify the compliance requirements for an agency under Part 2 of this order, if the agency is unable to comply with the requirements of that part. An agency requesting modification must show that it has made substantial good faith efforts to comply with that part. The availability and costs of alternative fuels and AFVs can be a factor in OMB's decision to modify the agency's compliance with Part 2 of this order.

Sec. 508. Definitions. Terms used in this order shall have the same definitions as those in the Energy Policy Act of 1992 and Executive Order 13101, unless specifically changed in guidance to be issued by DOE under section 301(b) of this order.

WILLIAM J. CLINTON
THE WHITE HOUSE,
April 21, 2000.